

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A semiconductor production reactor, comprising a reactor comprising at least one interior chamber surface primed, the at least one interior chamber surface comprising a first material and a substance incorporated in the first material, the substance [[to]] balances receipt of a to-be-controlled material.
2. (Currently Amended) The reactor of claim 1, wherein the primed interior chamber surface minimizes volatile compound or complex formation upon a to-be-controlled material contacting the interior chamber surface.
3. (Currently Amended) The reactor of claim 1, wherein the surface is primed to blocks an etching material.
4. (Original) The reactor of claim 3, wherein the blocked etching material is selected from the group consisting of fluorine, chlorine, oxygen, argon, bromine, fluorocarbons and chlorofluorocarbons.
5. (Currently Amended) The chamber of claim 1, wherein the primed interior surface includes a substance [[that]] binds with silicon and minimizes Si-F bonding.
6. (Currently Amended) The chamber of claim 1, wherein the primed interior surface includes a substance [[that]] minimizes formation of a volatile compound or complex.
7. (Currently Amended) The chamber of claim 1, wherein the primed interior surface includes a substance [[that]] minimizes SiF₄ formation.

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8. (Currently Amended) The chamber of claim 1, wherein the chamber is ~~silicon-based or silicon carbide based~~ comprises silicon or silicon carbide.
9. (Currently Amended) The chamber of claim 1, wherein the primed surface includes an equilibrium-shifting substance for impeding impedes reaction between the chamber surface and the to-be-controlled material.
10. (Currently Amended) The chamber of claim 1, wherein the primed chamber surface includes cobalt-silicon bonds and/or cobalt-fluorine bonds.
11. (Currently Amended) The chamber of claim 1, comprising a cleaned and primed substance-containing chamber surface.
12. (Currently Amended) The chamber of claim 1, including at least about 8 atom % cobalt in the ~~primed surface~~ at least one interior chamber surface.
13. (Currently Amended) A method of seasoning a reactor chamber, comprising at least the steps of:
providing a reactor chamber having at least one interior surface, the at least one interior surface comprising a first material;
priming incorporating a substance in the first material of the interior surface of the reactor chamber with, the substance comprising a seasoning element or compound containing seasoning atoms or molecules that when combined with the chamber surface and/or a material to be used in the reactor chamber are relatively less volatile than a combination, alone without the seasoning atoms or molecules, of the chamber surface and the material to be used in the reactor chamber.

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14. (Currently Amended) The method of claim 13, wherein the surface-priming step of incorporating a substance includes placing the seasoning element or compound in solid form in the reaction chamber.
15. (Original) The method of claim 13, wherein a cobalt-containing solid is placed in the chamber.
16. (Original) The method of claim 13, wherein the seasoning element or compound is selected from the group consisting of cobalt-based elements or compounds, aluminum-based elements or compounds, copper-based elements or compounds, titanium-based elements or compounds and silicon-based elements or compounds.
17. (Original) The seasoning method of claim 13, including periodic cleaning of the chamber.
18. (Currently Amended) An etching method, comprising:
providing a reactor chamber having at least one interior surface comprising a first material;
priming incorporating a substance in the first material of the interior surface of the reactor to minimize an undesirable reaction at the surface;
producing an etched product in the primed reactor chamber.
19. (Original) The etching method of claim 18, wherein the undesirable reaction is formation of a volatile compound or complex.
20. (Original) The etching method of claim 18, wherein the undesirable reaction is formation of SiF_4 .

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21. (Currently Amended) The method of claim 18, wherein after the step of incorporating the substance, the interior surface after priming includes Si-Co and/or Co-F bonds.
22. (Original) The method of claim 18, including producing an oxide or oxynitride film or etching via holes.
23. (Original) The method of claim 18, including periodically cleaning the chamber.
24. (Currently Amended) A method of controlling fluorine in production processes in a reactor, comprising at least the steps of:

priming incorporating a substance in a first material of an interior surface of the reaction chamber with, the substance comprising seasoning atoms or molecules that reduce the formation of volatile compounds and complexes when fluorine encounters the surface; and

conducting a production process in the reactor in which fluorine is present in the reaction chamber.
25. (Original) The method of claim 24, wherein the production process includes etching.
26. (Original) The method of claim 24, further including periodic cleaning of the reaction chamber.

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